

WHAT IS CLAIMED IS:

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a2  
5. 1. A semiconductor device comprising a first semiconductor chip consisting of at least either a circuit against static damage or a passive component.

2. The semiconductor device according to claim 1, wherein

10 said passive component includes at least one of a resistor, a capacitor and a reactor.

3. The semiconductor device according to claim 1, wherein

15 said first semiconductor chip consists of only said passive component.

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20 4. The semiconductor device according to claim 3, wherein

said passive component includes all of a resistor, a capacitor and a reactor.

5. The semiconductor device according to claim 1, further comprising a second semiconductor chip and a third semiconductor chip installed on a support substrate,  
25 wherein

said second semiconductor chip and said third semiconductor chip are connected with each other through said first semiconductor chip.

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6. The semiconductor device according to claim 5, wherein

said second semiconductor chip and said third semiconductor chip include no circuits against static damage.

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7. The semiconductor device according to claim 5, wherein

said second semiconductor chip is a DRAM chip, and said third semiconductor chip is a logic chip.

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8. A semiconductor device comprising:

a plurality of semiconductor chips installed on a support substrate; and

a wire connecting said plurality of semiconductor chips with each other and having a passive component function.

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9. The semiconductor device according to claim 8, wherein

said wire having a passive component function has a

length greater than that for linearly connecting terminals  
of said plurality of semiconductor chips with each other  
thereby forming a resistive element.

5 10. The semiconductor device according to claim 8;  
further comprising a dummy wire fixed to a prescribed  
potential and arranged to be opposed to said wire at a  
prescribed interval, wherein

10 said wire is combined with said dummy wire to form a  
capacitor.

11. The semiconductor device according to claim 8;  
wherein

15 said wire is formed either in a single layer or in  
two layers.

12. A semiconductor device having a plurality of  
semiconductor chips installed on a support substrate,  
wherein

20 at least one of said semiconductor chips includes:

a first input/output terminal, employed for testing  
an independent operating state of said semiconductor chip,  
having a first circuit against static damage,

a second input/output terminal, employed for  
25 connecting said semiconductor chip to said support

substrate, having a second circuit against static damage,  
and

a third input/output terminal other than said first  
input/output terminal and said second input/output

5 terminal, and

said plurality of semiconductor chips are connected  
with each other through said third input/output terminal.

10 13. The semiconductor device according to claim 12,  
wherein

said third input/output terminal includes no circuit  
against static damage.

15 14. The semiconductor device according to claim 13,  
wherein

said third input/output terminal includes only a  
resistor.

20 15. The semiconductor device according to claim 12,  
wherein

said third input/output terminal includes a third  
circuit against static damage, and

25 a transistor forming said third circuit against  
static damage is smaller than transistors forming said  
first and second circuits against static damage.

16. The semiconductor device according to claim 15,/  
wherein

5 the gate width of said transistor forming said third  
circuit against static damage is smaller than the gate  
width of said transistors forming said first and second  
circuits against static damage.

10 17. The semiconductor device according to claim 12,/  
wherein

said third input/output terminal includes a third  
circuit against static damage,

said third circuit against static damage is formed by  
a diode, and

15 said first and second circuits against static damage  
are formed by transistors.

18. The semiconductor device according to claim 12,/  
wherein

20 said plurality of semiconductor chips include a DRAM  
chip and a logic chip.

19. A semiconductor device having a plurality of  
semiconductor chips installed on a support substrate,  
25 wherein

at least one of said semiconductor chips includes:  
a first input/output terminal and a second  
input/output terminal,

5 a first circuit against static damage connected to  
said first input/output terminal, and

switching means connected between said first  
input/output terminal and said first circuit against  
static damage and on-off controlled by said second  
input/output terminal.

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20. The semiconductor device according to claim 19,  
wherein

said switching means is set to an ON state by  
applying no voltage to said second input/output terminal  
15 during a step of fabricating said semiconductor chips and  
set to an OFF state by applying a prescribed voltage to  
said second input/output terminal after completion of a  
chip connection step following fabrication of said  
semiconductor chips.

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21. The semiconductor device according to claim 19,  
wherein

said first circuit against static damage includes  
first and second transistors, and

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said switching means includes:

5 a third transistor connected between said first transistor and said first input/output terminal to enter an ON state when no voltage is applied to said second input/output terminal and enter an OFF state when said prescribed voltage is applied to said second input/output terminal, and

10 a fourth transistor connected between said second transistor and said first input/output terminal to enter an ON state when no voltage is applied to said second input/output terminal and enter an OFF state when said prescribed voltage is applied to said second input/output terminal.

15 22. The semiconductor device according to claim 19, wherein

a second circuit against static damage is connected to said second input/output terminal.